Stormwater Controls for New Development

"C.3" Fact Sheet
OCTOBER 2005

In a Nutshell: Stormwater Requirements for New Development

- Cover or control sources of stormwater pollutants.
- Treat stormwater runoff before discharge from the site.
- Maintain treatment devices in perpetuity.
- Limit runoff flow rates from the site.

Rules for Development Projects

New regulations require many development projects to treat stormwater runoff before it may be discharged to creeks or City storm drains.

In some cases, projects may also be required to detain or infiltrate runoff so that peak flows and durations match pre-project conditions.

Project plans must incorporate measures to prevent pollutants from entering runoff. For example, most outdoor equipment and work areas must be bermed and roofed.

In October 2001, the California Regional Water Quality Control Board for the San Francisco Bay Region (Water Board) revised Provision "C.3" in the NPDES permit governing discharges from the storm drain systems of Santa Clara County cities and towns.

The "C.3" requirements are separate from—and in addition to—requirements for erosion and sediment control and for pollution prevention measures during construction.

Project site designs must minimize the area of new roofs and paving. Where feasible, pervious surfaces should be used instead of paving so that runoff can percolate to the underlying soil. Runoff from impervious areas must be captured and treated. The permit specifies ways to calculate the required size of treatment devices.

In addition, project applicants must prepare plans and execute agreements to insure that the stormwater treatment devices are maintained in perpetuity.

The Water Board intends that post-project runoff flows and volumes will not exceed pre-project flows and volumes in areas where increases could accelerate erosion or cause other impacts to streams. Some projects in these areas will require a project Hydromodification Management Plan (HMP) to control runoff flows in addition to treating stormwater.

The City has created a ***Stormwater C.3 Guidebook*** to help developers comply with the requirements. The ***Guidebook***, other design resources, and helpful information are on the City's website at www.ci.milpitas.ca.gov.

This fact sheet provides a quick summary to help you get started on planning "C.3" compliance for your site.

Step by Step: Your Path to Project Approval

The City of Milpitas ***Stormwater C.3 Guidebook*** provides step-by-step guidance that will help you incorporate the required features into the site, drainage, and landscape designs for your project.

The process starts with a preapplication meeting with planning department staff. At this meeting, you can get upto-date information on the specific requirements that will apply to your project.

The planning department will require that you submit a Stormwater Control Plan as part of your application for planning and zoning approvals. Your Stormwater Control Plan will include all of the information needed to demonstrate that your project complies with the Water Board's "C.3" regulations.

Your Stormwater Control Plan must be certified by a qualified professional civil engineer.

City staff will use the checklist on page 2 to determine if your Stormwater Control Plan is complete. Following planning and zoning approval, you must ensure that each item in your Stormwater Control Plan is incorporated in the project construction plans.

A BMP Operation and Maintenance Plan must be submitted to the City before the end of construction. The occupant or owner must verify, at least annually, that the treatment and hydromodification management devices on-site are being maintained according to the plan.

INSIDE

Stormwater Control Plan Checklist

"Prepare your Stormwater Control Plan using the outline shown in Chapter 3, Step 10 of the Guidebook. A sample Stormwater Control Plan is included in Appendix D."

Show on drawings:

- ❑ Existing natural hydrologic features (depressions, watercourses, relatively undisturbed areas) and significant natural resources. *(Guidebook, Chapter 3, Step 1)*
- ❑ Soil types. Final project soil characteristics must be confirmed by site inspection or boring records, or specifications for fill, if a subsurface infiltration rate is used in design calculations. *(Chapter 3, Step 1)*
- ❑ Depth to groundwater. Must be confirmed if groundwater is generally shallow (<15 feet before ground surface) and a subsurface infiltration rate is used in design calculations. *(Chapter 3, Step 1)*
- ❑ Proposed design features and surface treatments used to reduce imperviousness or impervious area. *(Chapter 3, Step 3)*
- ❑ Existing and proposed site drainage network and connections to watercourses or storm drains. *(Chapter 3, Step 4)*
- ❑ Separate drainage areas, depending on complexity of drainage network. *(Chapter 3, Steps 4 and 5)*
- ❑ For each drainage area, types of impervious area (roof, plaza/sidewalk, and streets/parking) and area of each. *(Chapter 3, Steps 3, 4, and 5)*
- ❑ Proposed locations of infiltration or treatment BMPs. *(Chapter 3, Steps 4 and 5)*
- ❑ Pollutant source areas, including loading docks, food service areas, refuse areas, outdoor processes and storage, vehicle cleaning, repair or maintenance, fuel dispensing, equipment washing, etc. *(Chapter 3, Step 6).*

Include in a report accompanying the drawings:

"Your Stormwater Control Plan must be certified by a qualified professional civil engineer."

- ❑ Narrative analysis or description of project location, site features, and conditions that constrain, or provide opportunities for, stormwater control. *(Chapter 3, Step 2)*
- ❑ Narrative description of site design characteristics that protect natural resources. *(Chapter 3, Step 3)*
- ❑ Narrative description and/or tabulation of site design characteristics, building features, and pavement selections that reduce imperviousness of the site. *(Chapter 3, Step 3)*
- ❑ Tabulation of pervious and impervious area, showing self-retaining areas and areas tributary to each infiltration, treatment, or hydrograph modification BMP. (*Chapter 3, Steps 3, 4, and 5)*
- ❑ Preliminary designs, including calculations, for each treatment or hydromodification management BMP. Designs should include elevations showing sufficient hydraulic head for each feature or device. *(Chapter 3, Step 5)*
- ❑ Identify vector control *(Chapter 5)*
- ❑ A table of identified pollutant source areas and for each, the source control measure(s) used to reduce pollutants to the maximum extent practicable. *(Chapter 3, Step 6)*
- ❑ General description of BMP maintenance requirements. *(Chapter 3, Step 9)*
- ❑ A licensed professional engineer's certification that the measures specified in the report meet the requirements of the RWQCB Order. *(Chapter 3, Step 10)*
- ❑ A completed "Provision C.3 Summary Data Form."*(Chapter 3, Step 10).*

Does C.3 Apply to My Project?

The tables below will help determine if your project must meet C.3 and/or HMP requirements, and if so, what items need to be submitted. For waiver and/or Alternative Compliance alternatives, refer to Chapter 7 of the ***Guidebook***. For Hydomodification Management Plan requirements, refer to Chapter 8 of the ***Guidebook***.

Project Classification

Project Classifica-tions	Added or Replaced Impervious Surface Threshold	"Deemed Complete"	C.3 Required	HMP Required
Group 1	1 acre (43,560 square feet) or more	On or after October 15, 2003	√	
		On or after October 6, 2005	√	√
Group 2A	10,000 square feet or more for projects of concern	On or after October 6, 2005	√	
Group 2B	10,000 square feet or more	On or after August 15, 2006	√	

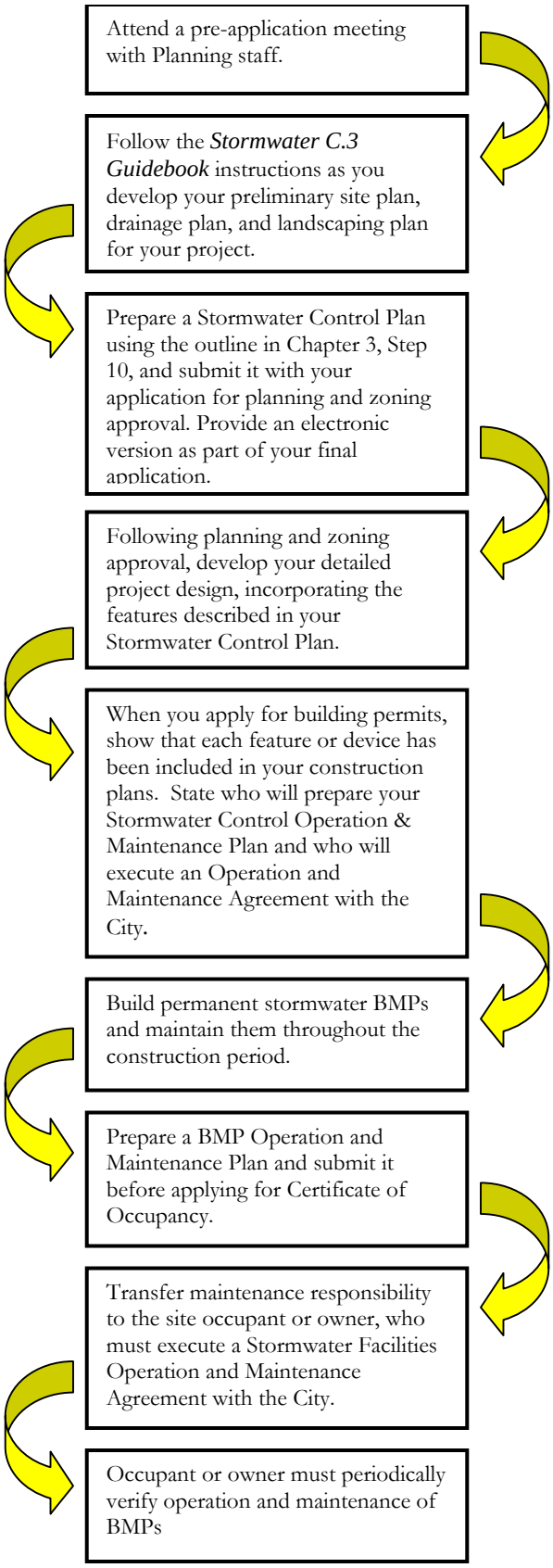
HMP = Hydromodification Management Plan

Required C.3 Submittals to the City

Description	No Waiver	Waiver or Alternative Compliance Granted
C3 Data Form	√	√
C3 Waiver Form (and/or C3 Alternative Compliance Form, if applicable)		√
Stormwater Control Plan (SCP)	√	√
Operation & Maintenance Plan	√	
Operation & Maintenance Agreement	√	
Hydromodification Management Plan (HMP) Form	√	√
Hydromodification Management Plan (HMP)	√	√

The Path to "C.3" Compliance

See the Stormwater C.3 Guidebook for details.



"Consider stormwater requirements at the very beginning of your site design and landscape design process."

Tips for Cost-Effective Compliance

To minimize the cost of building and maintaining permanent stormwater controls, the City of Milpitas recommends that you:

- Consider stormwater requirements at the very beginning of your site design and landscape design process.
- Follow the procedures in the *Stormwater C.3 Guidebook* to design and document your site design and stormwater controls.
- Use gravity to drain into, flow through, and drain away from swales and other biofiltration BMPs. Integrate these BMPs into site landscaping.
- Consider maintenance needs when selecting and determining the location of BMPs.

Frequently Asked Questions

Q: Are Milpitas' C.3 requirements different from those of neighboring cities and towns?

A: The Water Board has imposed the same permit provisions on all municipalities in Santa Clara, Contra Costa, San Mateo, and Alameda Counties and on Fairfield, Suisun City, and Vallejo in Solano County. Implementation schedules vary. Each municipality must determine how to integrate the C.3 requirements into their development review process. Milpitas' procedures and guidance to applicants include the following, which may be different from other municipalities:

- C.3 compliance must be documented in the application for Planning and Zoning review.
- The applicant must prepare a Stormwater Control Plan, following instructions in the City's *Stormwater C.3 Guidebook.*
- Milpitas encourages the use of planter boxes, swales, and other "biofiltration" BMPs distributed throughout the site and integrated into the landscaping.
- The City's *Stormwater C.3 Guidebook* has specific instructions for documenting that stormwater treatment BMPs are sized to meet the Water Board requirements. By following these instructions closely, the applicant can help ensure efficient review of the Stormwater Control Plan.

Q: Can I use the procedures in the Santa Clara Valley Urban Runoff Pollution Prevention Program's (SCVURPPP's) *C.3 Stormwater Handbook?*

A: Follow the instructions in the City of Milpitas *Stormwater C.3 Guidebook.* The SCVURPPP Handbook can be used as a technical reference if needed.

Q: Will Water Board staff be reviewing development projects?

A: Not for C.3 compliance. Municipal planning staff will review projects to ensure they comply with Provision C.3. If a project directly impacts a stream, the developer may also need to separately obtain a Section 401 Water Quality Certification from the Water Board. In addition, Water Board staff may comment on project CEQA documentation.

Q: What are the allowable pollutant discharge limits for stormwater?

A: There are no regulatory limits for the concentration of pollutants in stormwater discharges, nor are there criteria for the performance of stormwater treatment devices. Persons involved in activities which may produce stormwater pollutants must implement Best Management Practices (BMPs) to the maximum extent practicable. Provision C.3 does include criteria for sizing treatment devices.